

IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A method of forming two level structures in a semiconductor substrate, the method comprising:

forming lines of different widths having a first floor;
oxidizing the wafer until lines of thinner width are substantially fully oxidized;
etching the oxide to expose the first floor; and
etching the exposed first floor deeper into the substrate to form a second floor.

2. (Original) The method of claim 1 and further comprising removing the oxide from the lines.

3. (Currently Amended) The method of claim 1[[2]] wherein the oxide is etched removed using anisotropic HF etching or CHF₃ reactive ion etching.

4. (Original) The method of claim 1 wherein etching the oxide comprises using a CHF₃ anisotropic reactive ion etch.

5. (Original) The method of claim 1 wherein the semiconductor substrate is single crystal silicon.

6. (Original) The method of claim 1 wherein the first floor is etched deeper using deep reactive ion etching.

7. (Cancelled) The method of claim 6 wherein the deep reactive ion etch comprises a CHF₃ reactive ion etch.

8. (Cancelled) The method of claim 7 wherein the deep reactive ion etch is performed with CHF₃ flowing at a flow rate of approximately 30 sccm and a pressure of approximately 90 millitorr.

9. (Original) The method of claim 1 wherein the wafer is oxidized using thermal oxidation.

10. (Currently Amended) A method of forming multiple level structures in a semiconductor substrate, the method comprising:

forming structures in the substrate having different widths;

oxidizing the wafer until structures of a desired width are substantially fully oxidized and wider lines are not fully oxidized;

etching the oxide to expose a floor of the substrate; and

etching the floor deeper into the substrate to form a next floor.

11. (Original) The method of claim 10 and further comprising removing the oxide and repeating oxidizing, etching and etching to form a further level of the multiple level structure, wherein successively wider line widths are oxidized.

12. (Currently Amended) The method of claim 10 wherein the oxide is etched removed using anisotropic CHF₃ reactive ion etching.

13. (Original) The method of claim 10 wherein etching the floor of the substrate comprises using a reactive ion etch.

14. (Original) The method of claim 13 wherein the reactive ion etch comprises a CHF₃ reactive ion etch.

15. (Original) The method of claim 10 wherein the semiconductor substrate is single crystal silicon.

16. (Original) A method of forming multiple two level structures in a semiconductor substrate, the method comprising:

lithographically forming a pattern having structures of different widths, the structures extending up from a first floor of the substrate;

oxidizing the structures on the substrate until lines of structures of a selected width are substantially fully oxidized;

CHF₃ reactive ion etching the oxide to expose the first floor; and

selectively etching the first floor deeper into the substrate to form a second floor.

17. (Original) A method of forming a comb actuator in a semiconductor substrate, the method comprising:

forming pillars of alternating thick and thin widths extending from a first floor of the substrate;

oxidizing the wafer until pillars of thin width are substantially fully oxidized;

etching the oxide to expose the first floor;

etching the first floor deeper into the substrate to form a second floor; and releasing the comb actuator.

18. (Original) The method of claim 17 and further comprising removing the oxide and repeating oxidizing, etching and etching to form a further level of the multiple level structure.

19. (Original) The method of claim 17 and further comprising forming contacts to independently couple sources to the respective thin and thick lines.

20. (Original) The method of claim 17 wherein the thin and thick lines comprise comb fingers with a gap of between approximately 0.3 and 10 microns.

21. (Original) A method of forming two level structures in a semiconductor substrate, the method comprising:

forming lines of different widths having a first floor;

oxidizing the wafer until lines of thinner width are substantially fully oxidized;
etching the oxide to expose the first floor;
etching the exposed first floor deeper into the substrate to form a second floor; and
releasing the lines to form suspended structures.

22. (Original) The method of claim 21 wherein releasing the lines comprises:
oxidizing the lines; and
etching the substrate in all directions.
23. (Original) The method of claim 22 wherein etching the substrate in all directions comprises a SF₆ reactive ion etch.
24. (New) A method of forming multiple two level structures in a semiconductor substrate, the method comprising:
lithographically forming a pattern having structures of different widths, the structures extending up from a first floor of the substrate;
oxidizing the structures on the substrate until lines of structures of a selected width are substantially fully oxidized;
anisotropically etching the oxide to expose the first floor; and
selectively etching the first floor deeper into the substrate to form a second floor.
25. (New) The method of claim 24 and further comprising removing the oxide from the lines to form a two level structure.
26. (New) The method of claim 25 and further comprising releasing the two level structure.
27. (New) The method of claim 2 and further comprising releasing the lines to form a released two level structure.

28. (New) The method of claim 11 wherein with each successive oxidation, mechanical structures are formed on a new level.

29. (New) The method of claim 28 wherein the successive oxidations are performed to consume lower levels previously formed and create one new level.